

FIELD NATURALISTS' CLUB OF BALLARAT

EXCURSION / NEWS SHEET

OCTOBER, 1980.

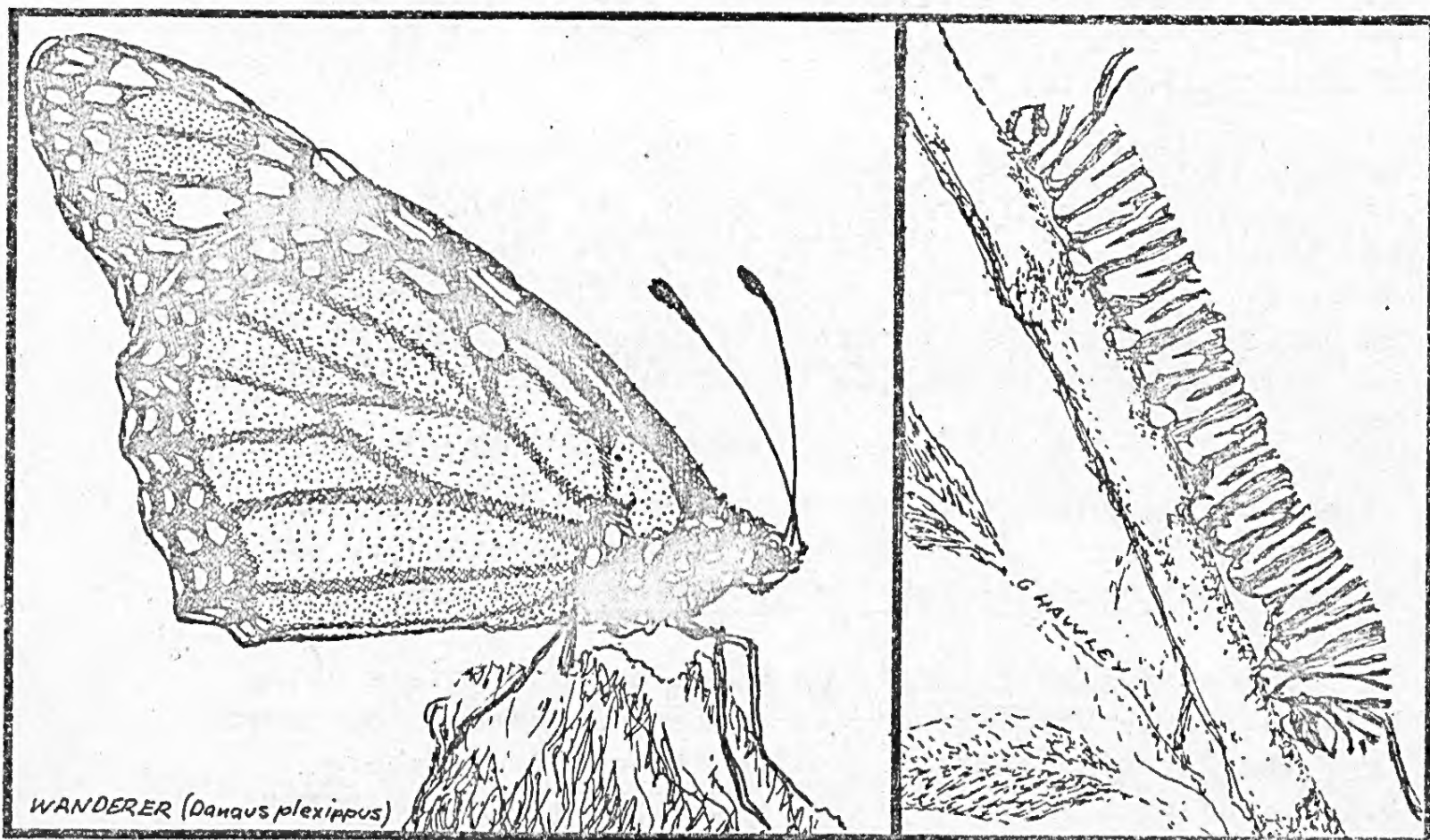
Meeting ...3rd October - "Butterflies" - Mr. D. Crosbie.

Meeting .7th November - 8 p.m. - Creswick School of Forestry -
Laboratory Study.

Excursion .SUNDAY 5th October - full day - Buln Gherin - Leader
Mr. I. Tiley.

Excursion .SATURDAY 25th October - full day - Mt. Beckworth - Leader -
Mrs. P. Murphy.

(Meet at Steam Engine, Civic Hall Car Park, 9.30 a.m.)



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Meetings, as specified, are held in the Administration Building of the School of Mines and Industries, Lydiard Street South, Ballarat, commencing 8 pm.
EXCURSIONS, AS SPECIFIED, COMMENCE FROM CROCKERS, Cnr. STURT and ARMSTRONG STREETS, BALLARAT, AT 9.30 am FOR FULL DAY OUTINGS, OR AT 1.30 pm FOR HALF DAY.

THE USE OF HOLLOWES BY MAMMALS AND BIRDS

Mr. Barry Golding presented a stimulating lecture at our last meeting. Besides the details of his study and continuing interest in bird and fauna nesting in hollows, he raised some issues that should be the concern of members.

Many marsupials and birds require hollows for nesting sites - to be used for periods related to the rearing of young or as a permanent nest. These hollows occur naturally in eucalypts which have been standing for at least 60 years. The better the tree is for hollows, the poorer is the condition of the timber for commercial use as this requires tall, straight and solid logs. Consequently in the clear-felling program of the Forests Commission, all the trees are taken, leaving two habitat trees per hectare. In turn these are felled, so no tree is allowed to mature and so provide natural hollows for nests.

Another problem posed by Barry related to the eucalypts left in agricultural areas. As these are isolated trees and the land is farmed close to them, few seeds germinate and grow to provide replacement. Dead old trees are not conducive to nesting; perhaps the natural ability of something growing to provide temperature control has been lost?

It has been evident that the continuous clearing of land by foresters and farmers has led to a great scarcity of mature trees suitable for the provision of nesting hollows.

To provide statistical data on birds and marsupials using hollows, Barry Golding and two others, a forester seconded from the Forests Commission and a student from Coburg S.C.V., using a \$16,000 grant from Fisheries and Wildlife, have completed information on "Hollows use in Wombat State Forest", "Temperature of Hollows in Wombat State Forest", and "Management of Hollows in Wombat State Forest". It has been found that 80% of mammals and 1/3 of the birds that

use the Wombat Forest need hollows for nesting.

The research rested on whether artificial hollows set some 4 - 6 metres in selected trees would provide suitable nesting sites for the needs of birds and marsupials in the forest. Wombat State Forest was chosen as a forest where there was a good healthy forest but no hollows, a second site which was a young clear felled forest and, as a control site, a section of forest in the Spargo Creek catchment area.

It has been found that different species need different types of hollows; variables include size, shape, wall thickness, depth of hollow, size of opening, height in tree and orientation. Some species use the same hollow each season, with no other bird or mammal using it. Other hollows have been known to have as many as seven species occupying the hollow at different times over three years.

Interesting slides were shown to describe the study and to help members see some of the amusing sides to research work. The creatures using the artificial hollows are brush-tailed and ring-tailed possums, galahs, crimson rosellas, kookaburras, marsupial mouse *Antechinus stuartii*, sugar gliders, owl night jars and ten different species of bats.

Ken Hammond thanked the speaker.

M. Tonkin.

MT. BECKWORTH EXCURSION, OCTOBER 25TH.

This being a full-day Saturday excursion, meet at the Steam Engine, Civic Hall Car Park at 9.30 a.m.

We are pleased that members of the Maryborough and Bendigo Field Naturalists' Clubs will be joining us on this occasion.

BITTERN LAGOON

A tree planting day was held on Sunday 24th August at the Bittern Lagoon, a 35 hectare area within the Langi Kal Kal Training Centre. There were 16 people who participated in the planting of approximately 200 trees and shrubs around the margin of the Lagoon. The plantings included acacia retinodes, eucalyptus camaldulerisis, melaleuca styphelaides, eucalyptus globulus and various grevilleas.

In the past, insects have played havoc with plantings and stock wandering through the lush green summer pasture of the Lagoon have not helped the survival rate of the very small trees. However, wire netting tree guards are being made by boys at the Centre and it is intended to keep gates shut and perhaps locked, to prevent entry of stock.

It is hoped that a follow-up program will ensue, perhaps in November, when watering, weeding and general care will help to establish the trees.

A very enjoyable luncheon was kindly provided by the Centre. Finally, many thanks to those who laboured in the field and to those who provided shrubs.

P. Murphy.

A Reminder :

W.V.F.N.C.A. CAMP OUT - MARYBOROUGH

Commencing Saturday October 11th at 10.00 a.m., and concluding with afternoon tea at 3.30 p.m. Sunday October 12th.

See our September Newsletter for the detailed programme. Hon. Secretary of Maryborough Field Naturalists' Club is Mr. G.D. Nicholls, 28 Wellington St., Maryborough. 3465.

MOSQUITO FLAT EXCURSION

A small group of us journeyed to Mosquito Flat and the Blucher's Reef area under the leadership of Dr. F. Harrap. We were pleased and enjoyed the company of Mr. Jim Pickford of Stawell, and his wife.

A few orchids were seen, but in the main it was a birding day, and a most successful and enjoyable day it was. Birds seen included Mountain Duck, Spur-winged Plover, White-backed Magpie, Raven, Black-shouldered Kite, Galah, Little Corella, Welcome Swallow, Red Wattle Bird, Restless Flycatcher, Yellow-tailed and Buff-tailed Thornbill, Fuscous, Yellow Tufted, White-naped, Brown and Brown-headed Honeyeater, Hooded, Yellow and Red-capped Robin, Crested Bellbird, Brown Tree Creeper, Eastern Shrike-tit, Whistling Kite, Dusky Wood Swallow, Red-rumped Parrot, Eastern Rosella, Diamond Fire-tail, Grey Shrike-thrush, Willie Wagtail, Horsefield Bronze, Fan-tailed, and Pallid Cuckoo, Olive-backed Oriole, Striated Pardalote, Peaceful Dove, White winged Chough (in nest), Grey Fantail, Black-faced Cuckoo Shrike, Blue Wren, Rufous Whistler, Weebill, Whiteface, Brown Flycatcher, Black Swan, Brown Quail, Little Eagle, White-browed Babbler, Skylark, Silver-eye, Red-browed Finch.

Our thanks from all present to Dr. Harrap for a most interesting and educational outing.

J. Netherway.

A book covering the T.V. series "Life on Earth" - David Attenborough has now been published.

Recommended retail price is \$19.95.

Those members who wish to purchase this book at a discount rate through the Club should record their names at this meeting.

PROJECT 1 : "A survey of the Orange-bellied Parrot in Tasmania, Victoria and South Australia".

The first stages of WWF Australia's first project have found encouraging indications of the survival of one of the world's most endangered species, the Orange-bellied Parrot.

Wildlife services in Tasmania, Victoria and South Australia are co-operating in the project which is being administered by the Tasmanian National Parks and Wildlife Service and is funded by WWF Australia with an allocation of \$42,938 into research into the parrot's ecology and status. This is aimed at saving the survivors and making recommendations on the care of its habitat in an effort to preserve the species.

Last summer, teams using base camps in the birds' summer habitat in South-West Tasmania, at Melaleuca Lagoon in Bathurst Harbour and Birch's Inlet at the southern end of Macquarie Harbour, made a survey of the birds' distribution, habitat and feeding requirements, searched for nests and looked for areas of vulnerability.

They located five nests (the first found since 1923) in which three families totalling ten young birds were reared. In autumn another survey traced the northward migration from the breeding grounds to their winter habitat in Victoria.

A significant find was that of the 71 parrots located on King Island at this time, at least 40 were young birds: some proof that young are being produced and survive long enough to leave Tasmania.

A winter survey located 74 birds in the biggest single concentration, at Point Wilson, near Geelong, Victoria, and a further 13 in the dunes near Robe, South Australia.

Further field work is proceeding this winter, with more work planned for next summer.

PROJECT 3 : "The Thylacine Quest"

The skills of the naturalist are being combined with those of the photographer and the results of computer analysis in the quest for the Tasmanian Tiger (or thylacine).

This major World Wildlife Fund Australia project, costing \$44,000, is to determine whether the rare marsupial still exists. It is being conducted by the Tasmanian National Parks and Wildlife Service.

The last documented member of the species died in 1934 in the Hobart Zoo.

The project got under way in January, with the aim of recording as much information as possible on the tiger for further analysis.

It is well publicised, the intention of this being to assure people that reported sightings would be carefully followed up with the aim of seeing that the animal is able to survive, and not be hunted or harassed.

In all, 280 records of sightings have been collected over the past 30 years, 30 of them since the project began this year. These have been analysed and fed into the Parks and Wildlife Service tape in the Tasmanian Government's computer.

Three automatic photographic units have been built for field work and these will be placed in six locations determined by analysis as being likely places in which tigers may be found.

Backup equipment provided for the project includes a four-wheel drive vehicle fitted out as a mobile photographic darkroom.

A National Parks and Wildlife Service trainee ranger, Adrian Pyrke, has been assigned to assist in this project, and has been working with project leader Stephen Smith in the field for the past two months. The mobile darkroom is

working very well. The three automatic photographic units have taken hundreds of photographs of native fauna, such as Tasmanian Devils and Native Cats. Unfortunately no thylacine has yet triggered a camera. The photographic units, powered by large lead accumulator batteries, are capable of operating continuously for about five days.

Intensive field work will continue until October. The results of the photographic survey, analysis of the thylacine sighting records, and historical research, will then be collated and reviewed. A project report will be prepared in which the probability of thylacine survival will be discussed.

PROJECT 4: "The Western Australian Subterranean Orchid"

One of the world's rarest and most endangered plant species is unique to Australia. It's the *Rhizanthella Gardneri* - the Western Australian Underground Orchid. This incredible flower grows and blooms underground, rarely to be seen by man.

Now, after only 5 previous discoveries early this century, it has been found once again. 10 specimens, in fact, were recovered from a Western Australian southcoast farm in the middle of last year.

It seems that the plant does make brief contact with the outside world. It sends out rhizomes into the open air. And that is the time to find it.

However, all potential locations of the orchid are in the Western Australian wheat belt which has lost most of its native vegetation. There are very few conservation reserves.

Dr. Wycherley, of the Kings Park and Botanic Garden is conducting a study of the orchid's unique biology. It is being funded by a \$29,000 grant from WWF Australia.

This study will also survey the relic native vegetation of the wheatbelt and recommendations for conservation and management sites will be made.